

Third European Electro-Optics Conference

October 5-8, 1976

Palais des Expositions Geneva, Switzerland

For details on attending, write or call SPIE offices:

P.O. Box 1146, Palos Verdes Estates, California 90274 (213) 378-1216

MONDAY OCTOBER 4, 4:00-6:30pm Registration

TUESDAY OCTOBER 5, 9:00am Opening of Conference

New Trends and Obsolescence in Civilian and Military Electro-optics in the Late 1970s and early 1980s, Dr. Herbert A. Elion, Arthur D. Little Inc., USA.

Session 1 Spectroscopy Instrumentation and Applications, 9:30am. Chairmen: Dr. L. H. J. F. Beckmann, NV Optische Industrie 'De Oude Delft', Netherlands, and Dr. D. J. Kroon, NV Philips Gloeilampenfabrieken, Netherlands.

Photo-acoustic Spectroscopy of Solids, A. Rosencwaig, Bell Laboratories, USA.

New Spectroscopic Techniques, F. Kneubuhl, ETH, Zurich, Switzerland.

Infrared Gas Spectroscopy System Using Pulsed Lead-chalcogenide Diode Lasers, W. Riedel, AEG-Telefunken Forschungsinstitut, Federal Republic of Germany.

Electro-optical Instruments for Remote Sensing of Atmospheric Gases, J. H. Davies, Barringer Research, Canada.

Recent Progress on CW Dye Lasers and Potential Applications, J. P. Laude, P. Gacoin, J. P. Gautherin, and D. Lepere, Instruments SA, France.

A Technique for Using Image Dissectors in Star Trackers without Mechanical Sun Shutter Protection Devices, R. A. Smith, Lockheed Electronics Co., USA.

Monitoring Complex Trace-gas Mixtures by Long-path Laser Absorption Spectrometry, B. D. Green and J. I. Steinfeld, Massachusetts Institute of Technology, USA.

Session 2 Integrated Optics and Electro-optic Communications, 1:45pm Chairman: Dr. Herbert A. Elion, Arthur D. Little Inc., USA.

Cost Effective Fiber Communication Systems and Markets, H. A. Elion, Arthur D. Little Inc., USA.

Recent Advances in Integrated Optics, D. B. Ostrowsky, University of Nice, France.

The Interactive Cable TV Project of Higashi Ikoma, Speaker to be announced.

High Radiance, Linear LEDs for Fibre Optic Communications, Speaker to be announced.

Recent Advances in Diode Lasers for Fibre Optic Communications, Speaker to be announced.

Recent Advances in Optical Communications from Space Satellites, A. L. Forfine, McDonnell Douglas Corp., USA.

Two Coupling Methods for Plane Symmetrical Dielectric Waveguides, F. Lanzl, O. Meyer and D. Rathjen, University of Hamburg, Federal Republic of Germany.

WEDNESDAY OCTOBER 6

Session 3 Testing, Measuring and Material Processing, 9:00am, Chairmen: Dr. Hans Tiziani, Wild Heerbrugg Ltd., Switzerland, and Jacques Ragot, SORO-Electro-Optics, France.

Quantitative Strain Measurements Through Holographic Interferometry, R. Dandliker, Brown Boveri, Switzerland.

Application of Laser Properties for Measurements and Non-Destructive Testing, B. Fillol and M. Olivie, SORO-Electro-Optics, France.

Acousto-optic tunable filter using LiNbO₃ Crystal, Y. Fujii and H. Hayaishi, University of Tokyo, Japan.

LiNbO₃ Laser Crystals, L. R. Rothrock, Union Carbide Crystal Products, USA.

Specification and Assessment of Surface Defects on Optical Components, A. J. Allnutt, Sira Institute, UK.

A Computer-controlled Laser Bore Scanner, C. K. Cheng, Bendix Corp., USA.

Velocity Profiles in Turbulent Flames by a Laser Doppler Anemometer, E. Milana, Fiat Laboratories, Italy.

Diffractionless Imaging of Particles, W. M. Boerner and M. Gassend, University of Manitoba, Canada.

Session 4 Electro-optic Storage, Memories and Holography, 1:40pm. Chairman: Dr. Hans Tiziani, Wild Heerbrugg Ltd., Switzerland.

Photorefractive Recording of Volume Holograms in Doped LiNbO₃, H. Kurz, Philips GmbH, Federal Republic of Germany.

The Magneto-optic Photoconductive Sandwich (MOPS), J. P. Krumme, H. Heitmann and K. Witter, Philips GmbH, Federal Republic of Germany.

Sponsored by:

The Society of Photo-Optical Instrumentation Engineers
Sira Institute, Ltd.
European Physical Society
Institute of Electrical & Electronics Engineers (Section 8)
Institute of Applied Physics of the Swiss Federal Institute of Technology

Spatial Frequency Distribution of Thermoplastic Frost Deformation, U. Killat, Philips GmbH, Federal Republic of Germany.

Session 5 Thermal, Low Light Level Imaging and Military Electro-optics, 3:40pm. Chairman: T. L. Williams, Sira Institute, UK.

High Modulation Transfer Function (MTF) Phosphor Screens, J. R. Piedmont and H. Pollehn, Night Vision Laboratory, Fort Belvoir, Virginia, USA.

THURSDAY OCTOBER 7

Session 6 Laser Induced Chemical Effects, 9:00am. Chairman: Dr. Charles S. Naiman, Sanders Associates, USA.

The Production of New Molecules and Materials by Laser Photochemistry, J. I. Steinfeld, Massachusetts Institute of Technology, USA.

Laser Induced Association as a Possibility for Isotope Separation, C. Schmidt, Brown Boveri & Co., Federal Republic of Germany.

Session 7 Opto-electronic Sensing and Display, Components and Systems, 11:30am. Chairman: Gerard R. Parsons, Integrated Photomatrix Ltd., UK.

Advances in ac Electroluminescent Powder Layers, A. G. Fischer, University of Dortmund, Federal Republic of Germany.

An Integrated Helmet-mounted Display and Line-of-sight Measuring System Utilising Solid State Technology, J. Campbell, Marconi-Elliott Avionic Systems Ltd., UK.

Incandescent Readouts in Military Applications, A. G. Hemming, Vitality Ltd., UK.

A dc Plasma Display Panel with Inherent Storage, J. M. S. Shofield, J. Smith, D. G. Simmonds and G. F. Weston, Mullard Research Laboratories, UK.

New Developments in Very High Resolution Vidicons, J. K. Fisher, General Electric Co., USA.

Session 8 Electro-optical Image Recording and Processing, 3:10pm. Chairman: Dr. Brian Thompson, Institute of Optics, University of Rochester, New York, USA.

Application of Electro-optic Device Image Recording and Processing, A. Gara, General Motors Research Laboratories, USA.

Image Properties of the Gamma Reticon, D. Kermeish, Webster Research Center, Xerox Corp., USA.

A Paper By, K. Knop, RCA, Zurich, Switzerland.

A Paper By, B. Thompson, Institute of Optics, University of Rochester, New York, USA.

FRIDAY OCTOBER 8

Session 9 Interactive Computer Graphics, 9:00am. Chairman: Dr. Manfred Tasto, Philips Forschungslaboratorium, Federal Republic of Germany.

Aspects of Interactive Computer Graphics, J. Encarnacao and R. Lindner, Technische Hochschule Darmstadt, Federal Republic of Germany.

Geometrical Processing with Interactive Graphics, Mamoru Hosaka, University of Tokyo, Japan.

Fault Tree Graphics, L. Bass, H. W. Wyhnholds, and W. R. Porterfield, Lockheed Missiles and Space Co., USA.

The Application of an Interactive Graphic Display in a CAD/CAM System for Mechanical Parts, W. E. Fischer, Philips GmbH, Federal Republic of Germany.

Mask Design for Integrated Circuits: An Application for Computer Graphics, E. Baubock, Philips GmbH, Federal Republic of Germany.

A Versatile and Cheap Approach to Graphics Processor Design, M. J. Holmes, Rutherford Laboratory, UK.

Interactive Computer Graphics on Medium Powered Systems, M. J. Blakemore, University of Sheffield, UK, and P. E. Lloyd, University of Manchester, UK.

Session 10 Progress in Laser Nuclear Fusion Technology, 1:25. Chairmen: Dr. Walter Kroy, Messerschmidt-Boljow Corp., Federal Republic of Germany, and Dr. J. L. Bobin, CEA, Limeil-Brevannes, France.

The state-of-the-art of laser nuclear fusion will be reviewed in two or three papers. On the previous day, Thursday October 7, a symposium on this subject will have ended at Berchtesgaden, Federal Republic of Germany, and a report from there on the latest developments is expected.